#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012348 Address: 333 Burma Road **Date Inspected:** 02-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** N/A **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Components

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

#### Segment-10AE

During random Quality Assurance Visual review of welds located on segment 9DW, this Quality Assurance Inspector (QA) discovered the following issues:

- -One (1) linear indication measuring approximately 28 mm in length.
- -The indications are clearly marked on the material near the weld.
- -The welds are identified as:
- 1. FB003-172-004, Longitudinal crack, approximately 28 mm in length@ PP88, Y location-11600 mm from Bike Path side.
- -These welds are Fillet weld joining the Floor beam Web to Flange.
- The Floor beam Web to Flange is identified as non SPCM.
- These welds are designated as non Seismic Performance Critical Member (non SPCM).
- -OBG segment 10CE is located front side of OBG Bay#14.
- The indications were discovered visually and confirmed by Magnetic particle Testing (MT) by Caltrans QA.
- -ZPMC Quality Control Personnel have performed 25% Magnetic Particle Testing of these welds.

For further information, please see the attached pictures below. Please see incident report on this date.

#### Bay#19

During random in process inspection of bike path, this QA inspector observed that ZPMC personal cutting parts of

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

BK4A-004 by oxy flame cutting process. Because of problem in design of bike path, ZPMC personal welded a bike path segment incorrect. For further information, please see the attached pictures below.

## Segment 10CE

This QA inspector performed VT of approximately 100% of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as OBG Components. The weld designations reviewed are as follows. For further information, please see attached pictures.

- -(FB003-172-004)@ PP93
- -(FB0024-009-093)@ PP93
- -(FB012-032-002)@ PP93
- -(FB012-030-001/002)@ PP94
- -(FB003-167-004/005)@ PP94
- -(FB028-010-092/093)@ PP94

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.







#### **Summary of Conversations:**

No relevant conversations.

**Comments** 

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Patel, Hiranch	Quality Assurance Inspector
Reviewed By:	McClendon, Timothy	QA Reviewer